

**WHAT IS CLAIMED IS:**

1. A communications network for interactive multimedia transmission comprising:

interactive multimedia mastering (IMM) system means for receiving program materials from a program source, the IMM system for separating the program materials into primary and secondary layers;

multimedia call processing system responsive to the interactive multimedia mastering system program materials for providing information;

means interactively responsive to the interactive multimedia mastering system means and the multimedia call processing system for controlling the flow of multimedia information to the multimedia call processing system; and

a plurality of interactive multimedia devices (IMD) for receiving and transmitting multimedia information to and from the multimedia call processing system,

**Scott, This is material that relates to Figure 2a and 2b** wherein the multimedia call processing system receives a control signal from at least one of the plurality of IMDs by voice mode, (the multimedia call processing system branches in accordance with the program materials,) the multimedia call processing system including means for switching to a data mode, the multimedia call processing system transmits the appropriate data back to the at least one of the plurality of IMDs and the multimedia call processing system

returns to the voice mode. This is the end of material  
that relates to Figure 2a and 2b.

*a* *Sub C17* 2. The system of Claim ~~1~~<sup>40</sup><sub>1</sub> in which the IMM system  
provides for subjective control of the quality of the  
5 multimedia information.

*a* 3. The system of Claim ~~1~~<sup>40</sup><sub>1</sub> in which the IMM system  
provides for objective control of the quality of the  
multimedia information through the use of a quality metric.

*a* 4. The system of Claim ~~1~~<sup>40</sup><sub>1</sub> in which the multimedia call  
10 processing system further comprises:

means for creating multiple multimedia files for use by  
the multimedia mastering system.

*a* 5. The system of Claim ~~1~~<sup>40</sup><sub>1</sub> in which the interactive  
multimedia devices are coupled to a printer to print  
15 information from the multimedia network.

6. The system of Claim 5 in which the interactive  
multimedia devices are coupled to a display.

7. The system of Claim 5 in which each of the  
interactive multimedia device has the ability to store  
20 information related to demographics and the characteristics  
of the interactive multimedia device and thereafter forward  
the  
information at an appropriate time.

*a* 8. The system of Claim 7 in which interactive  
25 multimedia device can delay transmission of information  
stored there within until the communication network is not

in use.

9. The system of Claim 7 in which the display comprises a television.

5 10. The system of Claim 9 in which control of the transmission of program source material is accomplished using a standard voice response system.

11. The system of Claim 9 in which control of the transmission of program source material is accomplished using an interactive voice response system.

10 12. The system of Claim 9 in which control of the transmission of program source material is accomplished using a computer processing system.

13. The system of Claim 10 in which a printer is connected to the IMD. *a*

15 <sup>13</sup> 14. The system of claim 10 in which a facsimile machine is connected to the IMD.

<sup>14</sup> 15. The system of claim 9 in which a telephone handset is used to control and select the transmission and presentation of program source material.

20 <sup>15</sup> 16. The system of claim 9 in which telephone keypad is used to control and select the transmission and presentation of program source material.

25 <sup>16</sup> 17. The system of claim 9 in which a remote control is used to control and select the transmission and presentation of program source material.

<sup>17</sup> 18. The system of claim 10 in which the IMD comprises a

music synthesizer and a multimedia decompression means for generating program source material.

18 19. The system of claim 10 in which the IMD comprises a music synthesizer and a key coding means for generating program source material.

19 20. The system of claim 10 in which the IMD comprises a music synthesizer and a generator means for generating program source material.

20 21. The system of claim 10 in which utilizes switching between data, voice and facsimile on a single telephone line to transmit program source material.

21 22. The system of claim 10 in which utilizes switching between data, voice and facsimile on multiple telephone lines to transmit program source material in parallel.

22 23. The system of claim 10 in which certain portions are designated as primary program material portions and certain portions of the MCPS are designated as secondary program material portions and are used to communicate primary and secondary multimedia information.

23 24. The system of claim 23 in which program transmission can occur simultaneously.

24 25. The system of claim 23 in which program material transmission can occur at a specified period of the day.

25 26. The system of claim 23 in which the program transmission can occur when the telephone line is not being utilized.

27. An interactive multimedia device comprising:  
means for separating the multimedia into primary and  
secondary layers based upon a program model;

memory means for receiving interactive multimedia  
information from the multimedia modem means;

means for enhancing the primary layer from the  
multimedia modem means in accordance with the program model  
to enhance interactivity;

**Scott, This is material that relates to Figure 5a**

the enhancing means further comprising means for  
determining whether one of a first and second approach is to  
be followed; first means responsive to the determining means  
for following the first approach for providing an objective  
metric of the perceived quality of the primary layer; second  
means responsive to the determining means for following the  
second approach for providing a subjective indication of the  
perceived quality of the primary layer;

**This is the end of material that relates to Figure 5a.**

means responsive to the enhancing means for  
decompressing the primary layer of the interactive  
multimedia information;

means for transmitting the uncompressed portion of the  
interactive multimedia information received from the  
telephone network;

means for mixing the decompressed portion with the  
uncompressed portion and providing an output;

means for providing the output of the interactive multimedia information to a display; and

means for interactively controlling the multimedia modem means, compressing means, decompressing means, mixing means and providing means to provide interactive multimedia information to the display.

28. The device of Claim 27 in which the separating means comprises keying the primary and secondary layers to the psychographic parameters. *a*

29. The device of Claim 27 in which the separating means comprises separate production sources for providing the primary and secondary layers.

30. The device of Claim 27 in which the separating means comprises means for spatially separating the primary and secondary layers in accordance with the psychographic parameters.

*Sub C 3* 31. A system for interactively providing enhanced information related to a communication network, the network including a first set of program source materials that is produced for a user, the network further including a second set of program source material that is related to the first set of program source material, the second set of program source material is stored in a separate location than the first set of program source material, the system comprising:

means for linking the first set of program source material with the second set of program source material in

synchronization, the first set of program source material being a different media type than the second set of program source material;

means coupled to the linking means for controlling the quality of the first and second sets of program source materials ;and

means for interactively producing the second set of program source material; wherein the user of the system can produce additional information related to the first set of program source material.

<sup>28</sup> 32. The system of claim <sup>27</sup> 31 including means for simultaneously displaying the second set of program source material with the first set of program source material.

<sup>29</sup> 33. The system of claim <sup>27</sup> 31 in which the second set of program source materials provides more detailed information related to the first set of program source materials.

<sup>30</sup> 34. The system of claim <sup>27</sup> 31 in which the second set of program source materials provides information that is different from but related to the first set of program source materials.

<sup>31</sup> 35. The system of claim <sup>27</sup> 31 in which the interactively producing means interactively displays the second set of program source material while the first set of program source material is produced.

<sup>32</sup> 36. The system of claim <sup>27</sup> 31 which further comprises means for selecting related services based upon the second

set of program source material.

37. The system of claim 31 in which controlling means provides for a subjective control of the quality of multimedia information.

5 38. The system of claim 31 in which the controlling means provides for an objective control of the quality of the multimedia information through the use of a quality metric.

**Scott, This is material that relates to Figure 5a**

10 39. The sytem of claim 31 in which the controlling means further comprises:

means for determining whether one of a first and second approach is to be followed;

15 first means responsive to the determining means for following the first approach for providing an objective metric of the perceived quality of the first and second set of program materials; and

20 second means responsive to the determining means for following the second approach for providing a subjective indication of the perceived quality of the first and second set of program materials.

*Add a5*